Course-level Assessment
Getting the basics right...

University of Maine
Office of Assessment
Brian Doore
Director of Assessment
Agenda

• Overview of UMaine’s plan for assessment
• Key attributes of effective course-level assessment
• Fitting embedded key assessments into your course, or using existing assignments as key assessment
UMaine plan for Assessment

• Background
• Central to teaching mission as a Land Grant
• Required by NEASC
  – 2015 Progress update
  – 2019 Review
• Implementation Plan
  – Pilot Programs (EES, NAS, MBS, MBBS, EDHD, FSN)
  – Phased implementation
UMaine plan for Assessment

• Professional development opportunities
  – Course level assessment
  – Program level assessment
• Website Resources
  www.umaine.edu/assessment
• Individual faculty consultation & support
  Brian Doore
  1-1522
  brian.doore@maine.edu
What will this look like?

- Faculty driven
- Cyclical
- Iterative
- Action-oriented
- Reflective
1. Set Learning Outcomes
2. Create Learning Opportunities
3. Conduct Assessment
4. Analyze Assessment Results
5. Enact Action Plan for Improvement
6. Evaluate Impacts
Course-level assessment: Validity
Your colleague says that their math (or fill in their discipline) course teaches students to reason well mathematically (or another skill e.g., “write well”). What MEASURABLE evidence can they provide that it actually does so?
Validity

• Three Key Concepts in Judging the Quality of an Assessment
  – Validity
  – Reliability
  – Usability
Why should you be bothered with these concepts anyway?

- Appreciate why all assessments contain error
- Know the various sources of error
- Understand that different kinds of assessments are prone to different kinds of error
- Build assessments with less error
- Know how to measure your error
- Know what is safe—and not safe—to conclude from assessment results
- Decide when certain assessments should not be used
Validity: a definition

• **Validity Definition**: Appropriateness of how scores are interpreted [and used]

• That is, to what extent does your assessment measure what you say it does [and is as useful as you claim]?

• Stated another way: To what extent are the interpretations and uses of a test justified by evidence about its meaning and consequences
Validity: key points

Validity is:
1. a matter of degree ("how valid")
2. always specific to a particular purpose ("validity for...")
3. a unitary concept (four kinds of evidence to make one judgment—"how valid?")
4. must be inferred from evidence; cannot be directly measured
Validity Types...

• Content: Did I assess what I taught?
• Construct: Did my assessment show students’ understanding of the key issues, concepts, and information?
• Criterion: Did my assessment align with known expectations and levels of achievement?
• Consequences: What are the potential impacts of my assessment? e.g., did my assessment promote future learning? Can I use the results to improve my course?
Questions guiding validation

• What are my learning objectives?
  – Did my assessment really address those particular objectives?

• Do the students’ test scores reflect what I want them to reflect?
  – What other factors may have influenced their scores?
    • Growth
    • Instruction
    • Intelligence
    • Cheating
    • Test design
Questions guiding validation

• Did testing have the intended effects?
  – What were the consequences of the testing process and the scores obtained?
Content Validity

• The extent to which an assessment’s tasks provide a relevant and representative sample of the domain of outcomes you are intending to measure.

• The evidence:
  – most useful type of validity evidence for course-based assessment
  – domain is defined by learning objectives
  – items chosen with table of specifications
Planning for Content Validity

- is an attempt to build validity into the test rather than assess it after the fact
- the sample can be faulty in many ways
  a. inappropriate vocabulary
  b. unclear directions
  c. omits higher order skills
  d. fails to reflect content or weight of what is actually taught
  e. "face validity" (superficial appearance) or label does not provide evidence of validity
  f. assumes that test administration and scoring were proper
Using a test Blueprint

• Using the assessment blueprint (handout or online form)
  – Enter 3-5 of your learning objectives for your course
  – Look at your first assessment of student learning (or think about what you would like to include on your first assessment).
  – Record on the blueprint what content is covered, and at what level.
Reflecting on your Blueprint

• If you have an existing assessment:
  – Is the proportionality of coverage on the exam similar to the weight it was given in instruction?
  – What is the level of cognitive demand required? Does it match with your intentions?
  – Does the alignment between the intended outcomes and the measured violate any of the issues spelled out on slide 16?
  – What changes, if any, might you make to your assessment?
Reflecting on your Blueprint

• If you do not have an existing assessment:
  – What is the balance of proportionality of content you want to achieve on your assessment?
  – What is the level of cognitive demand required? Does it match with your intentions?
  – Does your alignment between the intended outcomes and the measured violate any of the issues spelled out on slide 16?
  – What changes, if any might you make to your assessment?
Discussion

- Usefulness of assessment blueprints in assessment planning?
- Specific things you are thinking about for the future
- Supports that would be helpful to you